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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,373	09/25/2003	Jin-Woo Yu	1293.1878	3368

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STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER
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PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,373	<b>Applicant(s)</b> YU, JIN-WOO	
	<b>Examiner</b> Gautam R. Patel	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/26/05; 1/28/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-22 are pending for the examination.

#### Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

#### Drawings/Objection

3. The drawings are objected for following reasons:

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “sum signal ABCD” must be shown [based on clear explanation from the specification] or the feature be cancelled from the claim.

No new matter should be entered.

Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must consist of following:

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may be ***accompanied by a marked-up copy of one or more of the figures being amended, with annotations***. Any replacement drawing sheet ***must be identified in the top margin as “Replacement Sheet”*** and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. ***Any marked-up (annotated) copy showing changes must be labeled “Annotated Marked-up Drawings” and accompany the replacement sheet in the amendment (e.g., as an appendix).***

a proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Correction is/are required.

Correction may not be held in abeyance.

### Claim Rejections - 35 U.S.C. § 112

4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4, 9, 16 and 21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Sum signal which is sum of signals, A, B, C, and D required by the claims is not described in the specification. On page 4, paragraph 24 the specification mentions sum signal being a sum of signals, A, B, C, and D which are detected from the optical disc using a PD, but does not explain what these signals are and what their generation depends upon and also how they related to each other and more importantly to different parameters. Accordingly, the specification does not explain to one of ordinary skill in the art at the time of the invention, how to make and or use the invention comprising the so called claimed "A, B, C, and D signals".

5. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 9, 16 and 21 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4, lines 4-5 are confusing and unclear. It is not clear at all how these signals are generated from what value of which parameters and how are they related to each other.

Claims 9, 16 and 21 has the same problem.

### **Claim Rejections - 35 U.S.C. § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5-8, and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Choi et al., US. patent 6,252,835 (hereafter Choi).

As to claim 1, Choi discloses the invention, an apparatus for setting an offset in a DVD player, as claimed [see Figs. 5-7], including an offset measuring unit, and an offset setting unit comprising:

an offset measuring unit [fig. 5, unit 507] which measures one or more offset parameters for initial reproducing operations of the DVD player; and

an offset setting unit [fig. 5, unit 507] which, when the offset measuring unit measures the one or more offset parameters a number of times [fig. 6, step S609], calculates an average value [fig. 6, step S612 and fig. 7] of the measured offset values of the one or more offset parameters and sets, for each of the one or more offset parameters, the average value as a set offset value of the DVD player [col. 4, line 16 to col. 6, line 4].

7. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Choi:

comprising a storage unit [fig. 5, unit 508] which stores the set offset value of each of the one or more offset parameters [col. 4, lines 29-20; col. 5, lines 19-25].

NOTE: Choi stores offset values  $f_i$  and several  $f_0$  values are stored.

8. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Choi:

the set offset values are used as reference offset values during a subsequent initial reproducing operation of the DVD player [col. 4, lines 29-20; col. 5, lines 19-25].

NOTE: Choi stores offset values  $f_i$  and several  $f_0$  values are stored.

9. As to claims 6-8, they are method claims corresponding to claims 1, 3 and 5 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 1, 3 and 5 respectively, above.

10. As to claim 10, it is drawn to a program method corresponding to the method of claim 6, and is therefore rejected for similar reasons set forth in the rejection of claim 6, above.

NOTE: Storing programs on the disc and executing them is well known and does not constitute a patentable differentiation.

### **Claim Rejections - 35 U.S.C. § 103**

11. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 11-15, 17-20 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi et al., US. patent 6,252,835 (hereafter Choi) as applied to claims 1, 3, 5-8, 10 above in view of Suzuki et al., US. patent 5,457,587 (hereafter Suzuki).

As to claim 11, Choi discloses all of the above elements, including offset setting averaging offset values and adjusting offset based on small increments [see fig. 6]. Choi does not specifically disclose newly measured offset values are re-measured during a subsequent initial reproduction or does not disclose a counter which counts number of times the one or more offset parameters are measured.

However, the process of re-measuring and using counter of for reiteration is well known in the art for while.

Also more importantly Suzuki clearly discloses the concept of the newly-measured offset values are measured during a subsequent initial reproducing operation of a DVD player and a counter [an internal counter] for counting number of times the one or more offset parameters are measured [figs. 3, 6 and 9; col. 3, lines 36-61; col. 7, line 63 to col. 8, line 8].

Both Choi and Suzuki are interested in improving the automatic adjusting and correcting the offset in an optical disk device.

One of ordinary skill in the art at the time of invention would have realized that the system of Choi would have been sensitive to noise that will generated when offset values become too large because extremely small track pitch and thus would have compromised the quality of the electrical signals.

Therefore, it would have been obvious to have used a counter and subsequent measurement of the offset parameters in the system of Choi as taught by Suzuki because one would be motivated to reduce noise in the system of Choi and provide better signal controls and improve quality of the signal, especially when track pitch becomes small and avoiding the noise and undesirable effects caused on the adjacent tracks [col. 2, lines 16-23; Suzuki].

12. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Suzuki:

a counter which counts the number of times the one or more offset parameters are measured to determine the number of times the one or more offset parameters are measured [col. 7, line 63 to col. 8, line 8].

13. As to claim 12, it is rejected for the similar reasons set forth in the rejection of claim 3, supra.

14. The aforementioned claim 13, recites the following elements, inter alia, disclosed in Choi:

an offset measuring unit which measures the one or more offset parameters for initial reproducing operations of the DVD player; and

an operation unit which, when the offset measuring unit measures the one or more offset parameters a reference number of times, calculates an average value of the measured offset values for each of the one or more offset parameters, and sets the average value as the reference offset value for each of the one or more offset parameters of the DVD player [col. 4, line 16 to col. 6, line 4].

As to rest of the claim Suzuki discloses:

a counter which counts a number of times the one or more offset parameters are measured [col. 7, line 63 to col. 8, line 8].

15. The aforementioned claim 14, recites the following elements, inter alia, disclosed in Choi:

a comparator [fig. 5, unit 507] which compares, for each of the one or more offset parameters, the offset values, which are measured during initial reproducing operations of the DVD player, with the reference offset value; and

an offset adjuster [figs. 5, unit 507] which, based on a comparison result of the comparator for each of the one or more offset parameters, adjusts the reference offset value to the newly-measured offset value when the newly-measured offset value is different from the reference offset value, wherein the newly-measured offset values are measured during a subsequent initial reproducing operation of the DVD player [col. 5, line 19 to col. 6, line 16].

NOTE: unit 507 performs both these functions see fig. 6 steps 607, 610 etc.]

16. The aforementioned claim 15, recites the following elements, inter alia, disclosed in Choi:

when an error related to the offset occurs during reproducing operations of the DVD player, adjustment [ $\pm$  delta, in step S608] of an offset in the DVD player is repeated [col. 5, line 19 to col. 6, line 16].

17. As to claim 17, it is drawn to a method corresponding to the apparatus of claim 11, and is therefore rejected for similar reasons set forth in the rejection of claim 11, above.

18. As to claims 18, it is drawn to a method corresponding to the apparatus of claims 10 & 7, and is therefore rejected for similar reasons set forth in the rejection of claims 10 & 7, above.

19. As to claims 19 & 20, they are drawn to a method corresponding to the claims 14 & 15 respectively, and are therefore rejected for similar reasons set forth in the rejection of claims 14 & 15, above.

20. As to claim 22, it is drawn to a method corresponding to the apparatus of claim 11, and is therefore rejected for similar reasons set forth in the rejection of claim 11, above.

### **ALTERNATE REJECTION**

21. Claims 1-3, 5-8, 10-15, 17-20 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi et al., US. patent 6,252,835 (hereafter Choi) in view of Kiyoura et al., US. patent 5,600,615 (hereafter Kiyoura).

As to above claims Choi discloses the concept of focus offset values measurement storage of initial values adding delta increments to offset values repeating this operation and comparing these values [see figs. 5-7].

Choi does not specifically disclose newly measured offset values are re-measured during a subsequent initial reproduction or does not disclose a counter which counts number of times the one or more offset parameters are measured.

However Kiyoura clearly discloses the concept of re-measurement and counter for counting number of times measurement has taken place [figs. 6 & 9]. Even though these concept disclosed by Kiyoura are applied to servo gain and for CD player one of ordinary skill in the art would have applied these concept to DVD player and also to focus offset values, because the concept of stable loop control is equally applicable to any system which is concerned with deterioration of system parameters over a time under various environment conditions. Therefore the concept of servo control based on an error signal in CD player as disclosed by Kiyoura is equally applicable to DVD player and focus error signal because both are trying to solve the same problem under same conditions.

22. A search based on the best understanding of the claims has been made to find the most pertinent art, but no statement about invention will be appropriate at this time regarding the allowableness of claims 4, 9, 16 and 21 and no art rejection will be made in this office action regarding the claims 4, 9, 16 and 21, due to the speculation required to

interpret the claims because of their indefiniteness under 35 U.S.C. 112, 1st and 2nd paragraphs as noted above (see In re Steele, 134 USPQ 292).

**Other prior art cited**

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Nanba et al. (US. Patent 6781938)
- b) Trabert et al. (US. patent 6906888)
- c) Matsumoto (US. patent 5780989)
- d) Kadlec (US. patent 6970403)

**Contact information**

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



Gautam R. Patel  
Primary Examiner  
Group Art Unit 2627

May 30, 2006